

CALIFORNIA ENERGY COMMISSION

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Attention: Air Filter product manufacturers

Subject: New filter requirements in California's Building Energy Standards

The 2008 Update to the California Building Energy Efficiency Standards (Title 24, Part 6) became effective on January 1, 2010. The update to the Residential Standards includes new mechanical ventilation requirements. The ASHRAE 62.2-2007 Residential Ventilation Standards for Indoor Air Quality are adopted by reference in the 2008 Title 24 Standards.

The California Energy Commission has been working with the home building design industry in California to facilitate compliance with these new mechanical ventilation requirements. The ASHRAE 62.2 Standard includes the requirement for thermal conditioning equipment to have air filters that meet a minimum MERV 6 efficiency, and the filters must be selected and sized to operate at a clean pressure drop no greater than 0.1 inches of water column (inch w.c.) unless the equipment is designed or selected to accommodate an additional pressure drop imposed by the filter selection greater than 0.1 inch w.c..

Air conditioning system designers need access to pressure drop and airflow rate data for these filters in order to size and specify HVAC systems that perform properly with these filters. Our understanding is that filter performance data describing resistance and airflow rate is not typically published with the MERV rating, thus this necessary information has not been made available to system designers.

The Energy Commission intends to maintain a simple online database of air filter product performance information. We request your submission of this performance data for those filter products that you sell in California to enable the Energy Commission to post that information on the Energy Commission website for use by the public.

We intend to post performance data for MERV 6 through MERV 13 filter products rated at a face velocity of 295 feet per minute (fpm) as determined using the procedures in ASHRAE Standard 52.2-2007. The posted performance data will include the MERV rating number, the particle size efficiency (PSE) for the E₁, E₂, and E₃ ranges, and the clean filter pressure drop (inch w.c.) and airflow rate (cfm) at values of 50%, 75%, 100%, and 125% of the test airflow rate. Additionally, the airflow rate (cfm) at a pressure drop of 0.1 inch w.c., and the manufacturer's published specification for maximum airflow rate (cfm) with corresponding pressure drop (inch w.c.) will be reported.

Please provide all information shown in the spreadsheet (see link below) for your California-market filter products to the Energy Commission.

[AirFilterPerformanceData-SubmittalSpreadSheet20100408a.xls](#)

Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Standard 680-2009 can be utilized to demonstrate compliance with the air filter product performance requirements in ASHRAE 62.2-2007, thus published AHRI 680-2009 ratings documentation can also be utilized for submittal of air filter product performance data to the Energy Commission.

Please identify the name and contact information for the person in your organization who prepares your submittal so we can discuss the information as needed. Thank you in advance for your cooperation with the California Energy Commission.

Manufacturers' Air Filter Performance Data: A pdf file providing the air filter products performance information submitted by manufacturers can be viewed at the following link:

[AirFilterPerformanceData-ManufacturerSubmittals20100708.pdf](#)

If you have any questions, please contact:

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